ECO-URBANIZAREA: O PROBLEMĂ PRIORITARĂ ÎN ADMINISTRAŢIA PUBLICĂ

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ECO-URBANIZATION: A PRIORITARY PROBLEM IN PUBLIC ADMINISTRATION

Abstract
Many connections existing between urban space and environment, attracts the attention of corporations to adapt to the environmental rules, imposed because of the reasoning that the existence of urban space implies respect for the environment, any deviation from this implying a denial of the existing relations and propagated effects to a global level. Urban space require the efficient coordination of economic, social and environmental dimension in order to ensure a sustainable improvement, reduction of social inequity and global pollution. The negative impact on the environment in urban spaces surpasses their physical limits therefore they must be managed, dedicated and organized as real ecosystems.

***Keywords*:** Pollution, urban environment, sustainable development, built areas, quality indicators, environmental conditions

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Rezumat
Multiplele conexiuni existente intre spatiul urban si mediu, atrag atentia asupra necesitatii adaptarii acestuia la normele ecologice impuse, intrucat rationamentul existentei spatiului urban presupune respectarea mediului, orice abatere de la acest fapt implicand o negare a relatiilor existente cu impacte si efecte propagate la nivel global. Spatiul urban presupune coroborarea eficienta a componentelor economice, sociale si de mediu, in vederea asigurarii unei dezvoltari durabile, reducerii inechitatii sociale si a poluari globalei. Impactul negativ asupra mediului in arealele urbane depaseste limitele fizice ale acestora, motiv pentru care acestea trebuiesc gestionate, amenajate si organizate ca adevarate ecosisteme.

Cuvinte poluarea, mediul urban, dezvoltarea durabilă, zone construite, indicatori de calitate, condiţiile de mediu

1. INTRODUCTION

The reality today identifies with a period marked by important discoveries, but also of multiple transformations of human civilization. The global situation and existing environmental issues constitute a real threat to mankind and determine the need for the adoption of effective and rapid measures to reduce the negative impact. The evolution of human needs, as well as the their diversity causes a development of economic activities, mostly in urban spaces, in which, for the first time in the history of mankind live more people than in the rural space, amplifying the pressure on the environment, which shall constitute an essential element of human existence and evolution.

Urban spaces ensure the development of societies, being the actual geographical areas in which social, economic and ecological systems are combined. The trend of development increasingly emphasized, in correlation with the phenomena and processes specific to modern civilization, have become factors with major adverse effects in the environment. Global ecological situation and environmental problems require reconsidering the attitudes toward the environment, in the context of sustainable development, which wants a streamlining of human behavior and a rationalization of consumption, in the idea of meeting the needs of current generations but without affecting the ability of accommodating the needs of future generations and the adoption of eco-economical measures in order to reduce the risk for mankind.(Dociu, 2011)

The work of urban planning has continuous character and general interest, a demographic trend and a global component of the territorial change, implying the arrangement and organization of urban space in the context of rational and effective utilization of the land, ensuring the aesthetics of complexity, ensuring the needs of the population, but in a relationship of interdependence with the environment, each city being directly dependent upon the existing ecosystems around it. (Bran, 2006)

At the global level, urban areas constitute life space for 50% of the global population, though it is anticipated an increase in this proportion, the cities being considered as social progress engines, having influence both in innovations and cultural, educational or technological performances. In the last century, urban areas represented only 13% at the global level, however, it is anticipated that by the year 2050 they will represent 69% of the total area, earning 67 million people. The strong development of cities, their mode of management and operation, has a decisive influence on the environment by its defining factors, demographic variations, mobility or the phenomenon of globalization, imposing the need of a more controlled proces of sustainable urban development, having in attention the fact that

urban areas hold the majority of energy consumption at the global level, in the share of 80%, but also the largest share of carbon emissions, almost 75%. (McGranahan, 2010)

The process of quick urbanization amplifies the pressure on natural resources, on the conditions of life, natural ecosystems, but also on human health, the most affected being the poor inhabitants of urban areas. This phenomenon is determined by demographic growth, by the population migration to the urban spaces in order to obtain new opportunities, increasing the pressure on the necessity of expanding the infrastructure and rearranging natural zones with adverse effects on the environment.

For the purposes of remedying this problem is required the adoption of several policies, regulatory instruments, measures of adjusting that allow strategic planning and long-term urban territories, creating green spaces and improving the quality of the environmental factors.

Urbanization and urban spaces represent both opportunities and threats to the biodiversity zone. The dimension of opportunities requires compact green urban spaces among which there are multiple buildings, taking into account the fact that the quality of human life in these areas is influenced by the existence of urban green spaces and natural ecosystems. In the same measure, important for the life of the urban inhabitants are the ecosystems' services that are located in close proximity, being necessary the integration biodiversity into spatial plans at local or regional level.

Considering the interactions existing between urban areas and biodiversity is absolutely necessary to make efforts in order to reduce the loss of biodiversity but also ensuring a high quality level of human life. Urban revitalization requires new concepts for reintegration of nature in urban spaces, in a complex format, to ensure efficiency at a structural, functional and socio-economic level, but also the protection and conservation of the environment and human well-being.

FIGURE 1 - URBAN REVITALIZATION

The performance of green urban spaces resides from the ability to combine effective strategies for the environment and their physical structure, so they can be designed, planned and coordinated to an efficient limitation of carbon emissions and reduced harmful substances that have impact on the overall ecological condition. (Zimny, 1999)

Planning the urban ecological efficiency involves detailed exposure of flora and fauna in these areas, aiming to identify habitats that have a significant influence in protecting natural resources, in this way obtaining a sustainable planning, contrary to a simple spatial organization. (Dociu, 2011)

Urban areas represented in compact format, focusing on the greening of the main types of activities implemented have influenced the increase of energy efficiency; the rational use of energy at an urban level leading toward a reduction of total energy consumption.

Cities can be designed in order to ensure access to green sources of energy, determining significant beneficial effects on sustainable urban life, marked by reductions in individual consumption. Many cities of the world have identified such sources and opportunities such as Copenhagen, Oslo and Madrid.

Clearly, there is a maximum limit of urban density which can be achieved without generating environmental and social adverse effects, for example, in Karachi, Pakistan, the studies indicate that the density of population per hectare can reach a total of 3,000 people whose needs can be effectively gratified without compromising environmental status or social conditions.

The cities are founded as true centers of innovation due to the existence of the exchange of information and experience between resident population and workers, which ensure a transfer of ideas and opportunities. Also at city level there are concentrated multiple research institutions, businesses and service providers that can readjust technologies in accordance with the rules and environmental standards imposed. According to studies carried out by the OECD – Organisation for Economic Cooperation and Development "in urban space it uses a share of renewable technologies, 10 times higher than in the rural space, and the share certificates obtained in this respect is the majority in urban areas, representing a rate of 73%.

Urban opportunities have resulted in the intensification of efforts in the design of the sectorial strategies for the development of cities and urban areas. In the past few decades, taking into account the global context, investment projects have been carried out in view of the massive ecologization such as Eco City in Incheon Songdo or Masdar Eco City in Abu Dhabi, towns that impose high costs, but offers long-term sustainable advantages and have a minimal negative impact on the environment.

Greening cities must be made on social, economic and environmental benefit, as well as on future advantages that these structures will provide. In the framework of the environmental benefits are included, the majority of social, economic and environmental benefits by incorporating additional pollution reduction or improving the ecosystem condition of ecosystems, adjusting urban micro-climate, improving the quality of air and noise reduction.

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Economic benefits generated by the greening of urban areas refer to increasing the economic performances of the various organizations, but in agreement with the environmental protection and ecological performances, special and in assimilating and growth potential for the improvement of the condition of ecosystems, as in the present context, in which the count on a sustainable development perspective, economic performance cannot be achieved effectively without according to the environmental performance parameters and the legislation for each factor.

Basically, the process of improvement and ecologization in urban areas is a generator of new jobs in all areas of activity that require rehabilitation and a possibility of gearing in this process of disadvantaged social classes – reducing the level of poverty and social inequity.

Innovation and adaptation of urban ecological environmental standards are made in order to ensure the reasonableness of the urbanization and the overcoming of barriers, psychological, social or physical. (Bradbury, 2009). Urban green spaces provide also benefits on the health condition of the urban population, lowering the overall level of pollution, reducing the possibility of the appearance of natural or social risks and by constantly improving the quality and the ability of ecosystems to provide services

Facilitating the appearance and development of urban green areas involve multiple opportunities and many constraints, and we must be aware that the process itself is not only one of the nature of the technique, but one with many connections with cultural and political factors. So, getting the results you want in the meaning of green cities can be done only by a dynamic public-private partnership which could establish the measures and instruments necessary for planning and environmental adaptation .Solutions for green cities may not be fixed in short periods of time, implying a systematic approach in relation to the principles of sustainable improvement through the collaboration of all parties and concerned both at local and national.

Urban systems affects not only their own environment, but also areas more or less close, an example being the impact of emissions of greenhouse gases exceeding both the limits of the Netherlands and the European mainland, contributing to the impairment of the global climate and the formation of the greenhouse effect. Also, global food demand, for example, is responsible for the transformation of land on different continents, being a real threat to biodiversity. Agricultural lands are the most affected by the expansion of urban territory and anthropogenic spaces in general. In the period 1995-2005, 48% of the total areas which have become artificial surfaces were of permanent arable land or culture.

Currently, according to data centralized by the specialists at European level shall identify the following statistics: urban spaces deliver 69% of total CO2 emissions urban transport generates 70% of the volume of polluting emissions and 40% of the emissions of greenhouse gases (2008), and increasing

anthropogenic surface in the European countries ranged between 0 and 5% by fragmentation and reduction of the spaces open for creation of new urban centres on a wider area, affecting the biodiversity and ecosystem development.

Urban design and urban density are affecting the environment, deflated indicators signifying a reduction in the consumption of resources and energies. For example, while an per capita urban consumes annualy 4.9t equivalent petroleum, a per capita rural consumes only 3.5 tonnes. Otherwise the transport intensity in urban areas is much higher than in rural ones, the relationship can be sustained through the prism of several aspects, as well as the level of development of infrastructure, transport costs or the level of financial resources for the acquisition of the personal means of transport. However, the general tendency of development is counting on urban development, but the urban development threatens the eco-efficiency of the cities, as the relationship between expanding urban and negative environmental impact has a direct proportional increase rate: the growing number of population causes a higher consumption of energy, resources, and waste and emissions.

The cities are spaces in which the most powerful challenges can be found: resource limits, carbon emissions, pollution, human health factors, keeping you, but in which there are identified many and varied options, which attract millions of people in terms of the idea of new economic opportunities. (Rojanschi et al., 2006)

Cities play an essential role in the process of adapting the economy to the environment, for the purposes of creation of the green economy, both in developed countries and developing countries. There are clear opportunities for exploitation and organizing urban areas in a manner able to ensure the reduction of polluting emissions, improve the condition of ecosystems and minimize the risk to the environment.

Green cities are those that provide an aggregate complex economic and social benefits, which involves a reduction of polluting emissions, an adaptation to the ecological concepts of local economies – stimulating innovation and generating new jobs, but also benefits to sustainable long-term global environmental condition.

Thus, adaptation and transformation of towns in the areas of green is seen not only as a benefit for those areas or for their inhabitants, but also brings a global environmental benefit on condition that constitutes as a essential factor for the economic activity the relationship between the two being based on sustainable strategies. (Negrei, 2009)

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Thus, urban regions are faced with many problems, from the social, health and environmental, long-term, adaptation must include the reshape fundamental structure and urban managers, integration in policies related to all components that influence the quality of the environment. Reshape urban structure, architecture, transport and all the others component, through the urban landscape planning can turn into "urban ecosystems" which contribute to the restoration of the environment, reducing the negative impact and promoting the adaptation to current conditions. A better planning would ensure an improvement in the level of quality of life on the whole, but also the consolidation of new markets for new technologies or architectures of green.

Efficient solution in this context a represents planning cities so that you ensure a more reduced consumption per capita by sustainable means, reducing energy consumption at the level of each individual, the use of renewable energy and alternative fuels, but also through enforcement, regulations and directives on varied factors. Numerical growth of the population are expected that will reach European level somewhere to 521 million in the year 2035, celebrated being subsequently decline up to 506 million in 2060.

Urbanization is one of the great problems of mankind, the complexity of this subject coming from the complexity of the problems of urban areas which are amplified by transition to a sustainable development and whose effects are spread globally in direct connection with the quality of human life. The need to protect the environment is now not only a necessity, but also a duty towards future generations and the face of nature, that support essential of life.

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